

Information Item

California Postsecondary Education Commission

A Preliminary Regional Analysis of Undergraduate Enrollment Demand and Capacity for the University of California

In *Providing for Progress* (2000), the Commission estimated that California needed to prepare for approximately 714,000 additional students at its public colleges and universities by year 2010. Following the release of that report, a number of educators and legislators raised concerns regarding the adequacy of California's higher education physical capacity in accommodating anticipated increases in undergraduate demand on a regional basis.

Using eleven geographic planning regions, staff developed a comprehensive analysis of regional undergraduate demand and physical capacity for the California Community Colleges and the California State University (CSU). The report covered the ten-year period, 2000 to 2010, and was adopted by the Commission at its December 2001 meeting. The present report provides a preliminary analysis of regional undergraduate demand and physical capacity for the University of California. The study incorporates the most recent five-year capital outlay plans of the University and it accounts for anticipated enrollment demand related to the planned opening of the University's tenth campus, UC Merced, in Fall 2004.

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A Preliminary Regional Analysis of Undergraduate Enrollment Demand and Capacity for the University of California

*A Report of the California
Postsecondary Education Commission*



CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
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1 Background

THE COMMISSION'S statewide enrollment demand projections that were released in 2000 indicated that 714,000 additional students would seek enrollment at California's public colleges and universities between 1998 and 2010. It also was anticipated that California's significant independent higher education sector would need to accommodate approximately 79,000 additional students. The capital outlay cost to *expand, modernize, and renovate* the state's higher education physical plant was estimated at over \$1.5 billion per year for the remainder of the present decade. As shown by Display 1, the Commission's Undergraduate Enrollment Demand Projections have been quite reliable.

DISPLAY 1 CPEC Undergraduate Enrollment Projections Compared with Actual Enrollment, Fall 1996 to Fall 2001

<i>YEAR</i>	<i>ACTUAL ENROLLMENT</i>	<i>PROJECTED ENROLLMENT</i>	<i>DIFFERENCE (PERCENT)</i>
University of California			
1996	126,260	126,936	0.5
1997	128,976	128,468	-0.4
1998	132,477	130,004	-1.9
1999	136,782	136,117	-0.5
2000	140,816	139,664	-0.8
2001	147,571	143,344	-2.9
California State University			
1996	272,642	264,042	-3.2
1997	276,054	268,894	-2.6
1998	278,597	273,746	-1.7
1999	285,033	286,504	+0.5
2000	291,460	294,651	+1.1
2001	306,920	303,004	-1.3
California Community Colleges			
1996	1,408,780	1,360,040	-3.4
1997	1,451,981	1,389,863	-4.3
1998	1,496,271	1,421,410	-5.0
1999	1,549,921	1,512,567	-2.4
2000	1,587,119	1,551,199	-2.3
2001	1,686,663	1,623,942	-3.7

Following the release of the Commission's projections, a number of educators and legislators raised concerns regarding the adequacy of California's higher education physical capacity in accommodating anticipated increases in undergraduate demand on a regional basis. Using eleven

geographic planning regions, staff responded to those concerns by developing a comprehensive analysis of regional undergraduate demand and physical capacity for the California Community Colleges and the State University (CSU). The Commission adopted the study at its December 2001 meeting with the understanding that a similar study of regional enrollment demand for the University of California and the Independent higher education system would be undertaken.

The analysis revealed that undergraduate demand and capacity pressures would mount in all community college and CSU regions of the state, fueled principally by (1) regional demographic growth, (2) local labor market demand, (3) K-12 reform efforts in schooling to boost academic preparation, (4) increased perceived value among high school seniors regarding the social and economic benefits of postsecondary learning opportunities, and (5) regional educational outreach programs targeted at improving the participation of underrepresented demographic groups.

More specifically, the analysis indicated that the CSU could potentially face a 88,000 Full-time Equivalent Student (FTES) capacity deficit by 2010 if the system's current physical plant is not expanded, and if strategic planning initiatives--such as year-around operations, distance learning, and joint intersegmental facility use—are not implemented to the greatest extent possible. The community colleges are expected to face an unprecedented 315,058 FTES capacity deficit by 2010, absent funding of the system's capital improvement plans and implementation of other strategic initiatives that are directed towards more efficient use of existing facilities.

The present report provides a preliminary analysis of undergraduate regional enrollment demand and physical capacity for the University of California. It covers the nine-year period, 2001 to 2010. It is likely that some educators may question the appropriateness of such a study, because the university draws the majority of its entering freshman class from among a highly competitive statewide pool with little consideration given to an applicant's region of residence. It also could be argued that the University was founded in 1867 as a land-grant system with a research and innovation mission that was more national than regional in scope, as reflected by its initial research initiatives that modernized the nation's agricultural and mining industries and by its responsiveness to other pressing national research needs (e.g., overseeing the Los Alamos Scientific Laboratory).

It must be noted, however, that at least since the 1950s, the development of the University has been guided by both statewide and regional planning considerations. This is evident by the excerpt shown below, which was taken from a university planning document that discussed regional enrollment demand projections for the Merced campus that will open in 2005.

Even though UC campuses serve a statewide population, it also is a fact that each campus attracts a sizeable regional population. There are at least two reasons why it is useful to estimate regional enrollments. First, these estimates provide planners with the necessary information about the possible number of commuting students as compared to residential students, thereby helping to inform plans for housing, parking, and student services. Second, the estimates provide outreach staff and K-12 teachers and counselors with a clear sense of the number of students that are expected to meet the University's admission requirements, which enables UC to target academic and counseling programs more effectively.

The University implemented a new statewide program in 2001, called *Eligibility in the Local Context*, which also has regional implications. The program provides an additional path to UC eligibility. The path explicitly recognizes that student academic achievement is tied in numerous ways to the level of academic support resources available to students across socioeconomic school districts and regions of the state. Accordingly, the top four percent of college-bound seniors of local high schools are considered UC eligible if they successfully complete a set of core course requirements.

Estimating regional enrollment demand for the University proved to be challenging, because unlike the community colleges and the CSU, there is only a single campus in any given region. As such, estimating regional undergraduate demand for UC was essentially equivalent to estimating enrollment demand for each of the university's general campuses. This required staff to collect and analyze an enormous amount of campus-specific data, especially with respect to UC Berkeley and UCLA, since many of the enrollment management practices of those two institutions are somewhat different from the enrollment management practices of the other UC campuses.

Because there are some remaining technical and conceptual issues that are still under discussion with the University, the ensuing capacity analysis contained in this report should be regarded as tentative. The complete series of primary undergraduate enrollment demand projections are contained in Appendix A. A final report will be presented to the Commission in February 2003.

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A Preliminary Analysis of University Regional FTES Capacity

AS SHOWN BY DISPLAY 2, statewide undergraduate and graduate FTES demand for the University is expected to total 208,851 by 2010. The UC Office of the President's most recent *Capital Improvement Plan* anticipates that its system will grow by about 5,000 FTES per year and reach a planned target of 211,000 FTE students by 2010. Thus, the Commission's preliminary projected total FTES demand is within 99 percent of the University's estimate.

DISPLAY 2 University of California FTES Enrollment Demand and Capacity Analysis by Region, 2005-06 and 2010-11

	FTES Capacity 2000-01	2005-06		2010-11	
		Projected FTES Demand	FTES Capacity Surplus or Deficit	Projected FTES Demand	FTES Capacity Surplus or Deficit
REGION					
Sacramento Area	21,534	25,638	-4,104	28,591	-7,057
San Francisco Bay Area	34,388	31,592	NA	33,519	NA
North Central Valley	6,000	958	5,042	4,783	1,217
Central Coast	12,275	14,174	-1,899	15,081	-2,806
South Coast	19,048	21,822	-2,774	24,883	-5,835
Los Angeles County	37,504	31,312	NA	32,395	NA
Orange County	17,372	23,087	-5,715	25,736	-8,364
San Bernardino/Riverside	25,109	16,889	8,220	20,223	4,886
San Diego/Imperial	17,268	21,941	-4,673	23,639	-6,371
STATE TOTAL	190,498	187,412	-5,902	208,851	-24,330

* FTES capacity estimate for UC Merced in the North Central Valley is for 2005-06

Based on the system's current level of classroom and laboratory capacity, substantial capacity deficits are anticipated in all regions except the North Central Valley, where UC Merced is scheduled to open in Fall 2004 with an initial 6,000 FTES capacity, and the San Bernardino/Riverside Region, where UC Riverside is situated. No capacity surplus/deficit estimates are provided for the San Francisco Bay Area and the Los Angeles County Regions, where UC Berkeley and UCLA are located. This is because, as noted in all recent capacity reports of the Commission, those two campuses are essentially at their Long-range Development Plan (LRDP) lim-

its, and therefore, they could not possibly add the magnitude of full-time equivalent students implied by the State's space standards.

To derive the capacity estimates, the current assignable square feet (ASF) of university lecture and teaching laboratory space for each campus was converted to *FTES Capacity* estimates based on the State adopted space and utilization standards. The ASF figures were provided to the Commission by the University. Appendix B contains the conversion worksheet used by the Commission to derive the capacity estimates.

Across all regions, the University is shown to have a -5,902 FTES capacity deficit by 2005 that increases to -24,330 FTES by 2010. The deficits result because the Commission anticipates a 25 percent increase in first-time freshman demand (Appendix A-3) and a 35 percent increase in community-college transfer demand (Appendix A-2). The capacity pressures described here would be even more severe if the University reaches its goal of enrolling approximately 15,300 community college transfer students annually by 2005. The Commission's enrollment demand model, however, assumes a lower growth rate in transfers, which will be discussed in the next chapter.

Although the Commission did not attempt to develop graduate enrollment demand projections, it was necessary to include graduate demand in Display 2 in order to capture a complete picture of classroom and laboratory space needs. The Commission derived total regional FTES demand by dividing undergraduate FTES demand by campus undergraduate-graduate ratios provided by the UC Office of the President. The graduate proportion of total enrollment projected by the Office of the President for the campuses are provided below in Display 3.

DISPLAY 3 University Anticipated Graduate Enrollment Proportions

Region	Campus	Graduate Proportion of Total Enrollment
Sacramento Area Region	UC Davis	16.5
San Francisco Bay Area	UC Berkeley	27.0
North Central Valley	UC Merced	10.0
Central Coast	UC Santa Cruz	11.6
South Coast	UC Santa Barbara	15.2
Los Angeles County	UC Los Angeles	24.3
Orange County Region	UC Irvine	14.7
San Bernardino/Riverside	UC Riverside	14.2
San Diego/Imperial	UC San Diego	16.0
Statewide		18.1

CPEC analysts intend to schedule a meeting early next year with university planners to discuss the system's graduate enrollment plans. In short, those plans call for the Berkeley and Los Angeles campuses to maintain their current undergraduate-graduate ratios, while the remaining campuses are expected to increase their graduate enrollment ratios a few percentage points, so that on a systemwide basis, graduate enrollments will represent about 18 percent of total FTES enrollment.

The opening of the Merced campus is viewed by university planners as one of the most significant alternatives for accommodating enrollment demand. The campus is expected to support 25,000 FTES when it is fully built out, which will occur sometime after 2015, depending on the level of future capital outlay appropriations. Staff analysis reveals that by 2010, the Merced campus may potentially reduce the estimated FTES capacity deficit by about 16 percent. Funding university summer sessions at 40 percent of Fall/Winter/ Spring enrollments and expanding Long Range Development Plan enrollment limits at some UC campuses are other important alternatives under consideration by the University.

As part of the current study, CPEC staff reviewed the system's 2003-04 Capital Improvement Plan to assess the estimated cost of capital construction projects planned over the next five years and the potential increase in FTES capacity supported by those plans. The improvement plan seeks \$600 million for State-supportable functions.

Approximately \$350 million of the total capital need is related to constructing new facilities and expanding campus infrastructures to accommodate enrollment growth, whereas the balance of \$250 million is related to renewal and modernization of existing facilities and correcting seismic hazards. Included is \$78 million to complete the first phase of development for the UC Merced campus. The total UC budget figures are generally consistent with the Commission's estimate that annual capital outlay costs for all three public systems of higher education would total more than 1.5 billion.

Before discussing the enrollment projections in greater detail, it must be stressed that classrooms and laboratories are but two key facets of institutional capacity. Other types of facility space are also vital to the university. Those facilities include office and research space, museums, observatories, cultural centers, hospitals, theatres, student unions, auditoria, dormitories, and childcare centers. Thus, it is possible that an institution may have adequate classrooms and teaching laboratories, yet be unable to add any additional students due to a lack of support facilities, unless of course, good prior planning and appropriate capital outlay funding have produced a balanced physical plant.

Because those facilities are quite varied and unique, it is not possible at this time to apply a common space standard to determine the adequacy of those support facilities in relation to regional enrollment demand. Primarily for that reason, the discussion in this section has been limited to

marily for that reason, the discussion in this section has been limited to classroom and teaching laboratory capacities. Outlined below are some of the strategic initiatives that all three public postsecondary systems are engaged in to enhance their capacity to serve students without necessarily constructing new facilities:

- Expanding year-around operations and evening, weekend, and short-term intensive courses;
 - Increasing the use of regional educational centers and joint intersegmental facilities;
 - Expanding distributed learning opportunities (e.g., Internet, CD ROM, Digital Cable) to maximize student choice by making learning less dependent on physical space and location;
 - Supporting productive learning environments through the use of technology (e.g., animation, graphics, video, sound) that cause students to be more proficient learners so that they are able to realize their educational goals and aspirations more rapidly; and
 - Supporting alternative instructional delivery methods that make more efficient use of existing facilities.
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3

A Discussion of University Regional Undergraduate Enrollment Demand

UC community college transfer demand

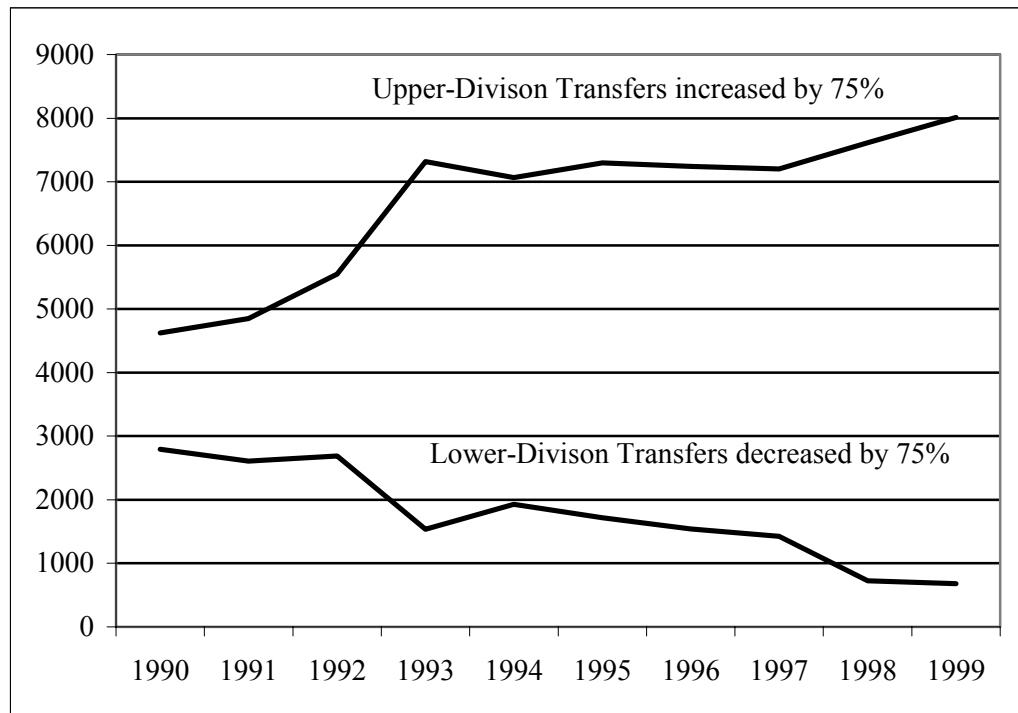
In 1999, the University established a partnership with the State to increase UC community college transfer enrollments by 50 percent, or 15,300 transfers annually by 2005. The University is actively engaged in a number of noteworthy initiatives to accomplish that goal. Those initiatives involve (1) improving course articulation procedures, (2) increasing its participation at local community college transfer centers, (3) expanding outreach program activities, (4) providing training to community college counselors who advise transfer students, and (5) creating more part-time options at the University for transfer students. A few specific examples are described below.

The *UC Berkeley Transfer Alliance Project* works with community college students who were previously involved in UC Berkeley high school outreach programs. The program involves academic advising and course planning. The *UC Davis Pipeline Program* is an Internet-based outreach strategy that updates community college students of newsworthy activities on the UC Davis campus and provides timely reminders on transfer relevant events. UC Irvine established a program called *The Orange County Transfer Consortium* (OCTC). One component of OCTC is the Summer Scholars Transfer Institute that provides an intensive summer residential experience for science majors. Another component of OCTC is the UCI Teach Project that introduces community college students interested in teaching careers to pedagogical issues.

A promising statewide initiative is the *Dual Admission Program*, which was adopted by the UC Board of Regents in 2001 and funded by the State Legislature in 2002. The program will offer admission to high school seniors who place within the top 4 and top 12.5 percent of their local graduating class, provided they fulfill their freshman and sophomore requirements at a community college. Because a number of the program's components are still under consideration by the Regents, it is difficult at this time to estimate the merit of the program and the impact it may have on the number of annual transfers to the University.

Display 4 reveals that programs, such as those just mentioned, as well other transfer initiatives, appear to be successful in increasing the number of upper-division-ready transfers to UC. *Upper-division* transfers are those students who have completed at least 56 semester units of coursework and are *ready* for upper-division university instruction and learning.

*DISPLAY 4 Community College Transfers to the University of California
By Student Level, Fall 1990 to Fall 1999*



As illustrated by the display, upper-division community college transfers to UC increased from 4,623 in 1990 to 8,011 in Fall 1999, which represents a 75 percent increase. During the same period, however, lower-division transfers (i.e., those with fewer than 56 semester units) declined by about 75 percent, so the net effect is that transfer rates have remained virtually constant over the study period.

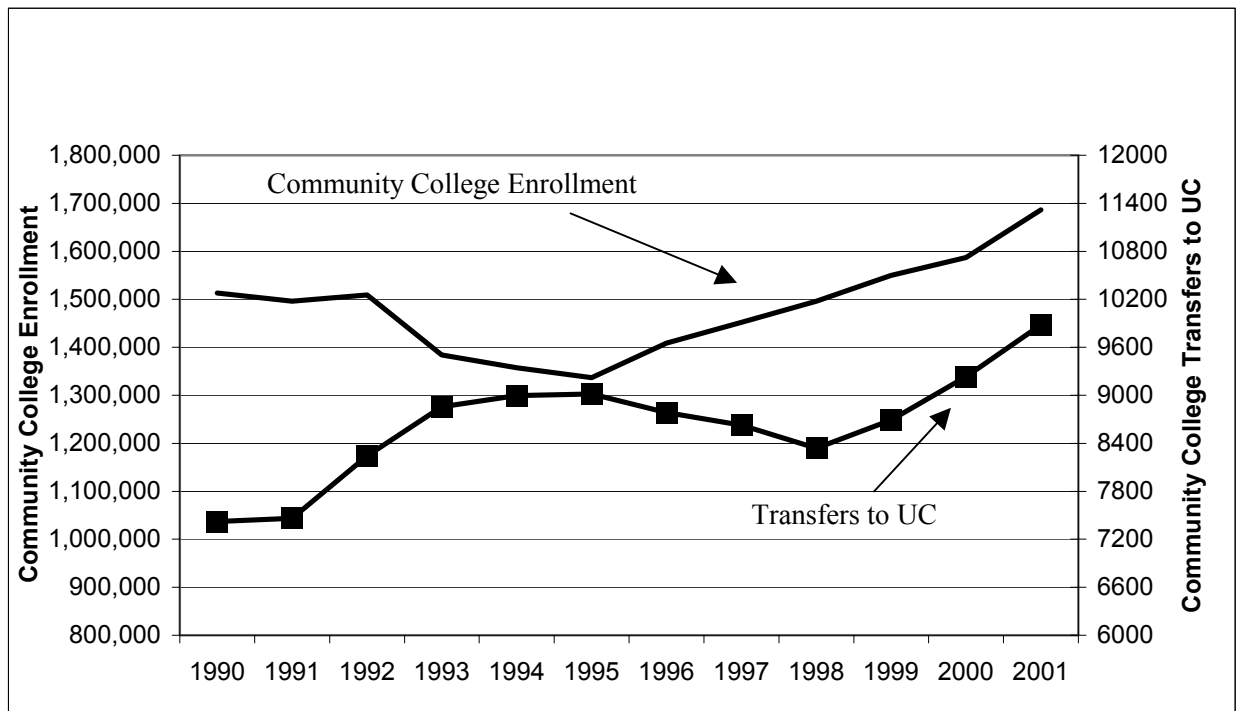
Even so, since 1998, as illustrated by Display 5, increases in total UC community college transfers have paralleled increases in community college enrollments, because constant or unchanged participation rates applied to an increasing community population base translates to increases in transfer enrollments.

In order for the University to reach its 2005 transfer target, annual community college transfer enrollments would have to increase by about 2,900 students between 2001-02 and 2005-06, or a 6 percent annual growth rate. Staff believes the required growth rate to be a bit ambitious, given that UC community college transfers have never increased at a 6 percent rate for four consecutive years, even though many of the University's transfer initiatives have been in place for over a decade.

Because the Commission is projecting significant growth in community college enrollments, it is likely that at a minimum, the University may enroll about 14,129 transfers annually by 2005 if transfer enrollments

more or less keep pace with the projected growth in community college enrollments.

DISPLAY 5 Illustrating of UC Community College Transfers Keep Pace with Growth in Community College Enrollments Since 1998



The Commission's forecast is based on that premise. Over the next nine years, the Commission anticipates that California community college transfers to UC will top 15,000 by 2008 and reach 16,686 by 2010, or a 35 percent increase over 2001-02 enrollments.

Historically, California community college transfers have accounted for about 89 percent of the total UC transfer population. The remaining 11 percent have included transfers from out-of-state, foreign countries, and other California public and private postsecondary institutions. The Commission expects that students from those types of institutions will continue to enroll at UC in about the same proportion. Thus, total transfers to UC are expected to increase from approximately 14,000 to nearly 19,000 by 2010-11.

To estimate UC community college transfer demand by region, Commission staff examined three types of participation rates by five age-groups. One rate, called the *mean regional participation rate*, represents the proportion of community college students of a particular region and age-group that transferred to any UC campus in a given year. Recall, that those rates have been held constant over the nine-year projection period.

Another rate, called the *within-region participation percentage*, represents the percentage of community college transfers to UC of a particular region and age-group that transferred to a UC campus in the same region as their community college. The rate is sometimes referred to as a *place-bound* rate. The place-bound rate, though, does not necessarily mean that transfer students live at home while enrolled at UC.

In general, students tend to transfer to a UC campus located in the same region as their community college of last attendance, if one exists, or in a region closest to their community college region. For example, of the Fall 2000 community college transfers to UC age 30-49 from the Sacramento Area Region, about 92 percent enrolled at UC Davis. Similarly, approximately 88 percent of the transfers from the San Bernardino/Riverside region of that same age group enrolled at UC Riverside. As noted previously, though, the degree of within-region transfer varies significantly by age cohort. In the much more numerous 20-24 age cohort, 57 percent of the Sacramento region transfers enrolled at UC Davis, and 61 percent of the San Bernardino/Riverside Region transfers enrolled at UC Riverside.

It is encouraging that a high proportion of local transfers in the San Francisco Bay Area and Los Angeles County are successful in gaining admission to UC Berkeley and UCLA, respectively, even though those two campus are exceptionally competitive. For example, in Fall 2000, UC Berkeley offered admission to about a third of the community college transfer applicants that applied to the campus, and 1,304 of the admitted students, or 65.6 percent, enrolled. Transfer students from community colleges located in the San Francisco Bay Area accounted for about 63 percent of the enrolled transfer population at UC Berkeley. Similarly, transfer students from Los Angeles County community colleges accounted for about 53 percent of the enrolled transfer population at UCLA.

The third rate tracked by the Commission is referred to as the *out-of-region* participation percentage. It represents the percentage of transfers of a particular region and age-group that have historically enrolled at a UC campus in a region different from their community college location. The Commission used the Fall 2000 within-region and out-region placement percentages in deriving the transfer forecast. The rates for the 20-24 age group, the 25-29 age group, and the 30-49 are contained in Appendix C.

**UC first-time
freshman
regional
enrollment
demand**

Unlike the State University, freshman participation for the University of California improved during the State's economic recession of the early 1990s. As shown by column 2 of Display 6, the mean UC public high school participation rate increased from 6.5 percent in 1990 to 7.2 percent in 2000. Except for the South Central Valley Region, the UC freshman participation rate for each public high school region was higher in Fall 2000 than it was in Fall 1990.

*DISPLAY 6 University of California Public High School Participation Rates by Region
Fall 1990 to Fall 2000*

	Statewide Mean	Northern CA.	Sac Area	SF Bay Area	North Central V.	South Central V.	Central Coast	South Coast	LA County	Orange County	San Bern/ Riverside	San Diego/ Imperial
1990	6.5	3.0	6.1	8.8	2.9	3.2	6.5	6.4	7.5	9.3	4.5	6.7
1991	6.6	3.2	5.6	8.6	3.1	3.3	6.2	6.2	7.3	9.5	3.9	7.0
1992	7.0	2.9	5.5	8.9	3.1	2.8	6.1	6.2	7.5	9.7	4.2	6.8
1993	6.8	2.7	5.5	9.0	3.0	2.7	6.3	6.2	7.2	9.5	4.6	6.8
1994	7.0	2.8	5.6	9.3	3.2	2.8	6.4	6.7	8.0	9.1	4.7	7.1
1995	7.0	3.1	5.8	9.4	3.1	3.0	6.4	6.4	8.0	10.0	5.0	7.7
1996	7.3	3.5	6.3	10.3	3.7	3.1	5.9	6.9	8.1	10.0	4.9	7.7
1997	7.2	3.3	6.3	10.2	3.7	3.4	6.0	7.4	7.6	9.6	4.9	8.0
1998	7.1	3.4	6.8	10.4	3.8	3.2	6.7	6.3	7.7	9.4	4.7	7.7
1999	7.1	3.7	6.4	10.3	3.3	3.4	6.8	6.7	7.7	9.3	5.1	7.3
2000	7.2	3.7	6.6	10.5	3.5	2.9	6.7	6.8	7.9	9.4	5.4	7.2
<u>Total Change</u>	0.7	0.7	0.5	1.7	0.6	-0.3	0.2	0.4	0.4	0.1	0.9	0.5

Like the CSU, there is a strong correlation between regional UC freshman participation and regional UC eligibility. As presented in Display 7, the San Francisco Bay Area Region and the Orange County Region have the highest UC public high school participation rates, 10.5 and 9.4, respectively, and they also have the highest UC eligibility rates, 18.0 and 15.5, respectively. This compares to an overall statewide UC eligibility rate of 11.1, based on the Commission's 1996 Eligibility Study.

DISPLAY 7 UC Eligibility of Public High School Graduates by Region

High School Region	UC Eligibility	
	<u>Percent</u>	<u>Rank</u>
Northern California	7.1	9
Sacramento Area	9.7	6
San Francisco Bay Area	18.0	1
Northern Central Valley	5.4	11
Southern Central Valley	6.0	10
Central Coast	11.4	4
South Coast	8.4	7
Los Angeles County	10.6	5
Orange County	15.5	2
San Bernardino/Riverside	8.1	8
San Diego/Imperial	12.9	3

Source: CPEC 1996 College Eligibility Study

With few exceptions, the Commission's forecast anticipates that each high school region will experience an average annual rate of improvement in UC freshman participation equal to the rate experienced between 1990 and 2000. Extending that rate over the projection period means that on a statewide basis the overall UC public high school participation rate is expected to increase by just under a tenth of percentage point per year for the next nine years.

Because the UC public high school freshman participation rate of the San Francisco Bay Area Region is more than 148 percent of the statewide rate, it is anticipated that continued growth in freshman participation of this region will not be as dramatic as that experienced over the past ten years. According, the Commission's forecast assumes a rate of increase for the region that is approximately half its historical rate of increase. Part of the rationale for adjusting the historical rate of change in the participation rate is related to the demographics of the region.

By year 2010, according to population projections prepared by the Demographic Research Unit of the Department of Finance, Asian and White ethnic-racial groups, collectively, are expected to account for about 65 percent of the San Francisco Bay Area's 15-19 age group. The remaining 35 percent is expected to be comprised primarily of Hispanic, African, and Native American persons.

Because the Asian and White UC freshman participation rates are already exceptionally high in comparison to the rates of the other ethnic groups, one would reasonably expect that any continued overall growth in the UC freshman participation rate of the region would come primarily from improvements in the UC participation of African American, Hispanic, and Native American high school graduates. Accordingly, the Commission anticipates that the region's UC freshman participation rate will increase by just under a tenth of a percentage point (half the historical rate of increase) per year for the next nine years. That growth rate is consistent with the projected statewide growth rate, and it allows for reasonable improvements in the UC participation of underrepresented ethnic-racial groups.

The other exception concerns the South Central Valley. Even though the region's 2000 UC freshman entry rate is lower than it was in 1990, its rate did increase from 2.8 percent in 1994 to 3.4 percent in 1999, and that increase is identical to the overall change in participation of its nearest neighbor, the North Central Valley Region. Accordingly, the Commission believes that the North Central Valley and the South Central Valley will experience similar rates of improvement in UC freshman participation, a contributing factor being the opening of UC Merced in the North Central Valley later this decade.

To project freshman enrollment demand on a regional basis, staff applied the projected regional participation rates to the Department of Finance's projections of public high school graduates by region. The Fall 2000 within-region and out-region placement percentages were used to estimate the migration pattern of students from their high school region to the UC region of enrollment.

Although not as dramatic as community college transfer flow patterns, there is a fairly strong propensity among many graduating seniors of northern California to enroll in a UC campus in the northern portion of the state, and likewise, a propensity among high school graduates in the most southern portion of the state to enroll in a UC campus of the same general area. For example, in Fall 1999, 34.6 percent of UC freshmen from the Northern Region and 40.2 percent of the freshmen from the Sacramento Area Region enrolled at UC Davis. Similarly, nearly 50 percent of the UC freshmen from the San Bernardino/Riverside Region enrolled at UC Riverside in 1999 and 33.5 percent of UC freshmen from the Or-

ange County Region enrolled in UC Irvine. Appendix D contains the transfer flow patterns of first-time freshman for all eleven regions.

Based on the anticipated increases in regional freshman participation, annual UC first-time freshman demand is projected to increase from 30,114 in 2001 to 37,771 in 2010, or 25.4 percent increase. It is assumed that graduates of California public high schools will continue to account for about 80 percent of the entering freshman class, and that about 13 percent of each class will be comprised of students from California private high schools. The remaining entering freshmen are expected to include students from out-of-state, foreign countries, and other California institutions.

The Commission elected not to develop freshman enrollment projections for UC Merced, and instead used the estimates provided by the Merced planning team. Those estimates show the campus opening with a freshman enrollment of 655 students that increases to 1,379 students by 2010. The planning team anticipates that between 40 and 55 percent of the entering freshman will come from graduates of high schools located in the North Central Valley. Commission staff elected to calculate the mean place-bound rate across all campus -- which was 31 percent -- and applied that percentage to the opening class. Thus, the Commission projects that about 202 of the initial 650 Merced freshman class will come from the North Central Valley. The place-bound or within-region rate was gradually increased to 35 percent in year 2010. So, in year 2010, about 483 of the UC Merced first-time freshmen (i.e., $.35 * 1,379$) are expected to have graduated from high schools of the North Central Valley.

**Total UC
undergraduate
demand by region
of UC campus**

The Commission's regional enrollment demand model, like its statewide enrollment model, is based on the premise that the majority of undergraduate students that will be enrolled in four-year public institutions in 2010 have not yet begun college. Because most University of California undergraduates either graduate or leave the University permanently within seven years, the University's regional enrollments in year 2010 would consist of all continuing students who are projected to first begin matriculating in year 2003 or later as either first-time freshmen or transfer students.

To estimate total undergraduate demand, the Commission's projections of first-time freshmen and transfer students were entered in a series of regional *life-tables* to simulate the likely enrollment life span of those students from entry to final departure. The life tables use persistence and graduation rates that UC provided to the Commission. The resulting regional enrollment demand totals were summed to a statewide grand total.

Based on the life-table analyses, total undergraduate demand is expected to increase from 147,521 students in Fall 2001 to 182,974 students in Fall 2010, or a 24 percent increase. The demand estimates are contained in Appendix A-4. The San Bernardino/Riverside Region, where UC River-

side is located, is shown to experience the largest percentage increase in undergraduate demand. The increase is associated primarily with demographic growth in the region. Accordingly, UC Riverside undergraduate enrollment demand is projected to increase by 50 percent, or an additional 6,000 undergraduates by 2010.

Regional headcount enrollments were converted to Year Average FTES estimates based on each campus's ratio of Fall enrollment to Year Average FTES, as reported in the University's 2002-03 Capital Improvement Plan and the system's most recent Statistical Abstract.

Next steps As mentioned previously, there are some technical issues that are still under discussion with the University, so the aforementioned analyses should be regarded as tentative. Three key issues are: (1) How might the reduction in campus enrollment pressures resulting from UC Merced be modeled best? (2) What would be a reasonable rate of improvement to project in regional community college transfer rates, even though rates have remained fairly constant? (3) To what extent might it be possible to estimate changes in regional attendance patterns as more UC campuses become oversubscribed or impacted?

Commission analysts hope to resolve those issues and present a revised final UC regional report in February 2002.

Appendix A University of California Undergraduate
Enrollment Demand Projections by Region
of Campus

*Appendix A-1 Annual Community College Transfer Demand for the University of California,
Academic Year 2000-01 to 2010*

Year	Total	Sacramento Area	SF Bay Area	N Central Valley	Central Coast	South Coast	LA County	Orange	San Bern/ Riverside	San Diego/ Imperial
		UC Davis	UC Berkeley	UC Merced	UC Santa Cruz	UC Santa Barbara	UCLA	UC Irvine	UC Riverside	UC San Diego
2001	12,369	2,230	1,813	NA	976	1,316	2,579	1,091	953	1,410
2002	12,728	2,304	1,859	NA	1,008	1,356	2,642	1,114	993	1,452
2003	13,155	2,389	1,914	NA	1,044	1,404	2,722	1,147	1,034	1,502
2004	13,479	2,460	1,962	NA	1,073	1,439	2,791	1,174	1,070	1,508
2005	14,129	2,527	2,008	252	1,106	1,479	2,862	1,203	1,109	1,583
2006	14,484	2,582	2,052	262	1,137	1,514	2,931	1,234	1,151	1,621
2007	14,925	2,651	2,102	336	1,166	1,553	3,014	1,267	1,189	1,647
2008	15,438	2,722	2,161	398	1,201	1,597	3,111	1,301	1,234	1,713
2009	16,015	2,798	2,225	454	1,244	1,648	3,233	1,358	1,286	1,770
2010	16,689	2,886	2,295	532	1,287	1,709	3,384	1,419	1,341	1,835
PCT Change	34.9%	29.4%	26.6%	111.1%	31.8%	29.9%	31.2%	30.1%	40.7%	30.2%
Actual Change	4,320	656	482	280	311	393	804	328	388	425

Appendix A-2 Total Annual Transfer Demand for the University of California, 2000-01 to 2010-11
(includes Transfers from Out-of-State, Foreign Countries, and Other CA Postsecondary Institutions)

	Total	Sacramento Area	SF Bay Area	N Central Valley	Central Coast	South Coast	LA County	Orange	San Bern/ Riverside	San Diego/ Imperial
Year		UC Davis	UC Berkeley	UC Merced	UC Santa Cruz	UC Santa Barbara	UCLA	UC Irvine	UC Riverside	UC San Diego
2001	13,898	2,506	2,037	NA	1,097	1,479	2,898	1,226	1,071	1,584
2002	14,301	2,588	2,089	NA	1,133	1,523	2,969	1,251	1,116	1,631
2003	14,781	2,684	2,150	NA	1,173	1,577	3,058	1,288	1,162	1,688
2004	15,144	2,765	2,205	NA	1,206	1,617	3,136	1,319	1,202	1,694
2005	15,873	2,839	2,256	281	1,242	1,661	3,216	1,352	1,247	1,779
2006	16,270	2,901	2,305	291	1,277	1,701	3,293	1,387	1,293	1,822
2007	16,766	2,979	2,362	373	1,311	1,745	3,386	1,424	1,336	1,851
2008	17,342	3,059	2,428	443	1,350	1,794	3,496	1,462	1,386	1,925
2009	17,989	3,144	2,500	504	1,398	1,852	3,633	1,526	1,445	1,989
2010	18,745	3,243	2,578	591	1,446	1,921	3,802	1,595	1,507	2,062
PCT Change	34.9%	29.4%	26.6%	110.3%	31.8%	29.9%	31.2%	30.1%	40.7%	30.2%
Actual Change	4,847	737	541	310	204	259	586	243	260	283

Appendix A-3 Annual First-Time Freshman Enrollment Demand for the University of California, 2001-02 to 2010-11
(includes out-of-state students, and students from foreign institutions)

Year	Total	Northern California	Sacramento Area	SF Bay Area	N Central Valley	So. Central	Central Coast	South Coast	LA County	Orange	San Bern/ Riverside	San Diego/ Imperial
			UC Davis	UC Berkeley			UC Santa Cruz	UC Santa Barbara	UCLA	UC Irvine	UC Riverside	UC San Diego
2001	30,114	NA	4,240	4,518	NA	NA	2,372	3,898	4,386	4,012	3,222	3,466
2002	30,750	NA	4,354	4,529	NA	NA	2,439	3,997	4,438	4,127	3,309	3,557
2003	31,678	NA	4,497	4,577	NA	NA	2,520	4,146	4,491	4,283	3,477	3,687
2004	32,115	NA	4,572	4,547	NA	NA	2,559	4,215	4,545	4,357	3,568	3,752
2005	32,641	NA	4,563	4,464	655	NA	2,503	4,139	4,575	4,378	3,607	3,756
2006	34,103	NA	4,784	4,635	680	NA	2,622	4,343	4,656	4,611	3,826	3,946
2007	35,165	NA	4,913	4,765	871	NA	2,682	4,452	4,732	4,745	3,945	4,060
2008	37,223	NA	5,159	5,057	1,035	NA	2,821	4,718	4,811	5,079	4,229	4,315
2009	37,475	NA	5,151	5,065	1,176	NA	2,804	4,708	4,892	5,120	4,242	4,317
2010	37,771	NA	5,152	5,076	1,379	NA	2,792	4,686	4,972	5,132	4,258	4,325
PCT Change	25.4%		21.5%	12.3%			17.7%	20.2%	13.4%	27.9%	32.2%	24.8%
Actual Change	7,657		912	558	724		420	788	586	1,120	1,036	859

*Appendix A-4 Total Undergraduate Enrollment Demand for the University of California by Region of Campus
Fall 2001 to Fall 2010*

		Sacramento Area	SF Bay Area	N Central Valley	Central Coast	South Coast	LA County	Orange County	San Bern/ Riverside	San Diego/ Imperial
Fall	Total	UC Davis	UC Berkeley	UC Merced	UC Santa Cruz	UC Santa Barbara	UCLA	UC Irvine	UC Riverside	UC San Diego
2001	147,521	21,356	23,153	NA	12,034	17,724	25,328	17,723	12,714	17,489
2002	150,718	21,939	23,429	NA	12,249	18,195	25,577	18,211	13,300	17,818
2003	153,999	22,538	23,708	NA	12,468	18,679	25,828	18,713	13,912	18,153
2004	157,368	23,154	23,990	NA	12,691	19,176	26,081	19,228	14,553	18,495
2005	161,802	23,786	24,276	975	12,917	19,686	26,337	19,757	15,223	18,843
2006	165,862	24,314	24,565	1,753	13,079	20,210	26,517	20,302	15,924	19,198
2007	170,008	24,854	24,858	2,531	13,242	20,748	26,698	20,861	16,658	19,559
2008	174,243	25,406	25,154	3,309	13,407	21,300	26,880	21,435	17,425	19,927
2009	178,571	25,970	25,454	4,088	13,575	21,866	27,064	22,025	18,227	20,302
2010	182,974	26,526	25,757	4,867	13,744	22,448	27,248	22,632	19,067	20,684
PCT Change	24.0%	24.2%	11.2%		14.2%	26.7%	7.6%	27.7%	50.0%	18.3%
Actual Change	35,453	5,170	2,604	3,892	1,710	4,724	1,920	4,909	6,353	3,195

Note: Fall 2001 figures are actual student headcounts.

Worksheet to Estimate UC Classroom Appendix B and Laboratory Capacity Based on State- Adopted Space and Utilization Standards

***Appendix B Worksheet Used to Estimate UC Classroom and Laboratory FTES Capacity
Based On State-Adopted Space and Utilization Standards***

CAMPUS	Class Rooms		Teaching Laboratory		Total FTES Capacity
	Fall 2000 ASF	Conversion of ASF to FTES Capacity	Fall 2000 ASF	Conversion of ASF to FTES Capacity	
UC Davis	105,373	16,368	189,002	5,166	21,534
UC Berkeley	186,632	28,990	197,467	5,397	34,388
UC Santa Cruz	63,819	9,913	86,424	2,362	12,275
UC Santa Barbara	100,686	15,640	124,695	3,408	19,048
UC Irvine	110,722	17,199	63,171	1,727	18,925
UC Los Angeles	219,090	34,032	127,036	3,472	37,504
UC San Diego	92,396	14,352	106,667	2,916	17,268
UC Riverside	64,382	10,001	64,439	1,761	11,762

Technical Notes:

Classroom FTES Capacity is based on 2.33 Weekly Student Contact Hours (WSCH) per ASF.

Classroom Conversion Formula is: $(2.33 * \text{classroom ASF})/15$.

Laboratory FTES Capacity is based on an average of .41 WSCH per ASF.

Laboratory Conversion Formula is: $(.41 * \text{laboratory ASF})/15$.

Appendix C Within-Region and Out-Region Placement
Percentages of California Community
College Transfer Students to UC
by Age-Group, Fall 1993 and Fall 2000

*Appendix C-1 Within Region and Out-Region Community College Transfers to the University of California, Fall 1993& Fall 2000
20 to 24 Age-Group*

Community College Region of Last Attendance		Number	UC Region of Transfer (sums to 100%)							
			Sac. Area	SF. Bay Area	Central Coast	South Coast	LA County	Orange County	San Bern/ Riverside	San Diego/ Imperial
			UC Davis	UC Berkeley	Santa Cruz	Santa Barbara	UCLA	UC Irvine	UC Riverside	UC San Diego
Northern CA	1993	83	63.9%	7.2%	8.4%	9.6%	6.0%	1.2%	0.0%	3.6%
	2000	94	56.4%	10.6%	12.8%	8.5%	3.2%	0.0%	4.3%	4.3%
Sacramento Area	1993	311	59.5%	13.2%	4.8%	9.0%	7.1%	1.6%	1.3%	3.5%
	2000	430	57.2%	10.2%	4.4%	8.6%	6.0%	3.0%	0.7%	9.8%
SF Bay Area	1993	1,621	27.8%	28.8%	14.2%	9.4%	12.1%	1.4%	1.7%	4.6%
	2000	2,077	30.6%	26.3%	10.8%	7.6%	11.9%	2.1%	2.3%	8.4%
N. Central Valley	1993	132	54.5%	6.8%	15.2%	9.1%	9.8%	0.8%	1.5%	2.3%
	2000	165	46.7%	11.5%	9.7%	12.1%	10.9%	1.8%	1.8%	5.5%
So. Central Valley	1993	140	27.9%	8.6%	12.1%	15.7%	19.3%	5.7%	2.1%	8.6%
	2000	195	27.7%	7.7%	5.1%	16.9%	14.9%	8.7%	6.7%	12.3%
Central Coast	1993	203	14.3%	8.4%	55.7%	8.4%	7.4%	0.5%	1.0%	4.4%
	2000	202	21.3%	9.9%	47.5%	5.9%	5.9%	2.0%	0.5%	6.9%
South Coast	1993	615	6.3%	3.1%	7.5%	61.0%	14.6%	2.6%	1.0%	3.9%
	2000	611	3.9%	2.9%	5.2%	54.8%	19.0%	3.4%	2.3%	8.3%
L. A. County	1993	1,515	2.2%	9.3%	4.1%	9.6%	54.0%	10.4%	5.8%	4.7%
	2000	1,567	2.7%	7.5%	2.7%	7.3%	48.1%	14.2%	7.8%	9.6%
Orange County	1993	819	2.1%	5.4%	6.7%	31.0%	19.9%	41.3%	5.0%	6.6%
	2000	795	3.0%	5.8%	2.8%	6.3%	30.9%	35.2%	5.0%	10.9%

Appendix C-1 (Continued)

Community College Region of Last Attendance		Number	<i>UC Region of Transfer (sums to 100%)</i>							
			Sac. Area	SF. Bay Area	Central Coast	South Coast	LA County	Orange County	San Bern/ Riverside	San Diego/ Imperial
			UC Davis	UC Berkeley	Santa Cruz	Santa Barbara	UCLA	UC Irvine	UC Riverside	UC San Diego
San Bernardino/ Riverside	1993	240	2.9%	3.8%	3.8%	5.8%	13.8%	7.9%	56.7%	5.4%
	2000	343	2.9%	3.8%	2.9%	3.5%	10.5%	7.9%	61.2%	7.3%
San Diego/Imperial	1993	548	2.6%	7.7%	5.5%	8.0%	10.0%	6.0%	3.3%	56.9%
	2000	472	4.2%	5.7%	5.5%	7.6%	12.3%	4.7%	4.4%	55.5%
Statewide Totals	1993	6,227	15.1%	13.0%	9.7%	14.9%	23.1%	9.7%	5.3%	9.4%
	2000	6,951	17.7%	12.6%	7.3%	11.7%	22.2%	9.4%	6.9%	12.1%

*Appendix C-2 Within Region and Out-Region Community College Transfers to the University of California, Fall 1993& Fall 2000
25 to 29 Age-Group*

Community College Region of Last Attendance		Number	UC Region of Transfer (sums to 100%)							
			Sac. Area	SF. Bay Area	Central Coast	South Coast	LA County	Orange County	San Bern/ Riverside	San Diego/ Imperial
			UC Davis	UC Berkeley	Santa Cruz	Santa Barbara	UCLA	UC Irvine	UC Riverside	UC San Diego
Northern CA	1993	20	65.0%	20.0%	0.0%	5.0%	5.0%	0.0%	0.0%	5.0%
	2000	15	80.0%	6.7%	0.0%	0.0%	6.7%	6.7%	0.0%	0.0%
Sacramento Area	1993	54	70.4%	11.1%	3.7%	9.3%	3.7%	0.0%	0.0%	1.9%
	2000	69	69.6%	11.6%	1.4%	4.3%	7.2%	0.0%	2.9%	2.9%
SF Bay Area	1993	324	22.2%	45.1%	18.5%	4.0%	6.8%	0.6%	0.3%	2.5%
	2000	297	26.6%	38.0%	11.1%	5.7%	9.4%	2.4%	1.0%	5.7%
N. Central Valley	1993	15	37.5%	0.0%	18.8%	25.0%	12.5%	0.0%	6.3%	0.0%
	2000	18	44.4%	22.2%	5.6%	16.7%	5.6%	0.0%	0.0%	5.6%
So. Central Valley	1993	16	37.5%	0.0%	18.8%	25.0%	12.5%	0.0%	6.3%	0.0%
	2000	11	9.1%	18.2%	18.2%	0.0%	27.3%	0.0%	9.1%	18.2%
Central Coast	1993	57	3.5%	7.0%	77.2%	7.2%	3.5%	0.0%	1.8%	0.0%
	2000	48	6.3%	2.1%	72.9%	8.3%	2.1%	0.0%	4.2%	4.2%
South Coast	1993	95	5.3%	6.3%	4.2%	61.1%	13.7%	4.2%	0.0%	5.3%
	2000	77	3.9%	2.6%	10.4%	54.5%	16.9%	1.3%	2.6%	7.8%
L. A. County	1993	281	2.5%	7.5%	3.9%	6.8%	61.2%	10.3%	5.7%	2.1%
	2000	292	1.7%	12.3%	1.7%	6.2%	47.9%	13.7%	10.6%	5.8%
Orange County	1993	145	3.4%	6.2%	2.8%	2.8%	20.7%	56.6%	5.5%	2.1%
	2000	144	4.2%	4.2%	2.8%	4.2%	22.2%	47.9%	8.3%	6.3%

Appendix C-2 (Continued)

Community College Region of Last Attendance		Number	<i>UC Region of Transfer (sums to 100%)</i>							
			Sac. Area	SF. Bay Area	Central Coast	South Coast	LA County	Orange County	San Bern/ Riverside	San Diego/ Imperial
			UC Davis	UC Berkeley	Santa Cruz	Santa Barbara	UCLA	UC Irvine	UC Riverside	UC San Diego
San Bernardino/ Riverside	1993	58	0.0%	3.4%	3.4%	0.0%	6.9%	5.2%	75.9%	5.2%
	2000	70	1.4%	2.9%	1.4%	2.9%	5.7%	7.1%	72.9%	5.7%
San Diego/Imperial	1993	65	7.7%	10.8%	3.1%	9.2%	12.3%	3.1%	7.7%	46.2%
	2000	154	3.9%	8.4%	4.5%	3.9%	4.5%	2.6%	3.2%	68.8%
Statewide Totals	1993	1,219	13.0%	17.5%	11.6%	9.4%	21.0%	10.2%	6.3%	11.0%
	2000	1,150	14.9%	16.1%	8.5%	8.5%	20.7%	11.0%	9.4%	10.9%

*Appendix C-3 Within Region and Out-Region Community College Transfers to the University of California, Fall 1993& Fall 2000
30 to 49 Age-Group*

Community College Region of Last Attendance		Number	UC Region of Transfer (sums to 100%)							
			Sac. Area	SF. Bay Area	Central Coast	South Coast	LA County	Orange County	San Bern/ Riverside	San Diego/ Imperial
			UC Davis	UC Berkeley	Santa Cruz	Santa Barbara	UCLA	UC Irvine	UC Riverside	UC San Diego
Northern CA	1993	15	73.3%	13.3%	0.0%	6.7%	6.7%	0.0%	0.0%	0.0%
	2000	13	53.8%	30.8%	7.7%	7.7%	0.0%	0.0%	0.0%	0.0%
Sacramento Area	1993	44	86.4%	6.8%	2.3%	0.0%	4.5%	0.0%	0.0%	1.9%
	2000	38	92.1%	5.3%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%
SF Bay Area	1993	223	26.9%	50.7%	14.3%	2.7%	4.9%	0.4%	0.0%	0.0%
	2000	230	26.5%	50.9%	10.4%	2.6%	6.1%	1.7%	0.9%	0.9%
N. Central Valley	1993	10	50.0%	10.0%	30.0%	0.0%	0.0%	10.0%	0.0%	0.0%
	2000	6	83.3%	0.0%	16.7%	0.0%	0.0%	0.0%	0.0%	5.6%
So. Central Valley	1993	9	44.4%	11.1%	11.1%	22.2%	11.1%	0.0%	0.0%	0.0%
	2000	10	20.0%	30.0%	20.0%	0.0%	10.0%	0.0%	20.0%	0.0%
Central Coast	1993	64	1.6%	6.3%	90.0%	1.6%	0.0%	0.0%	0.0%	0.0%
	2000	44	4.5%	0.0%	81.8%	4.5%	6.8%	0.0%	0.0%	2.3%
South Coast	1993	79	3.8%	8.9%	0.0%	77.2%	6.3%	3.8%	0.0%	0.0%
	2000	54	5.6%	3.7%	1.9%	74.1%	11.1%	3.7%	0.0%	0.0%
L. A. County	1993	156	1.3%	10.3%	2.6%	6.4%	64.7%	10.9%	2.6%	1.3%
	2000	175	3.4%	12.6%	0.6%	2.9%	62.3%	12.0%	2.9%	3.4%
Orange County	1993	100	1.0%	8.0%	1.0%	3.0%	5.0%	76.0%	5.0%	1.0%
	2000	62	0.0%	8.1%	3.2%	1.6%	11.3%	64.5%	8.1%	3.2%

Appendix C-3 (Continued)

Community College Region of Last Attendance			UC Region of Transfer (sums to 100%)							
			Sac. Area	SF. Bay Area	Central Coast	South Coast	LA County	Orange County	San Bern/ Riverside	San Diego/ Imperial
		Number	UC Davis	UC Berkeley	Santa Cruz	Santa Barbara	UCLA	UC Irvine	UC Riverside	UC San Diego
San Bernardino/ Riverside	1993	46	0.0%	2.2%	0.0%	0.0%	6.9%	2.2%	93.5%	2.2%
	2000	56	1.8%	3.6%	0.0%	1.8%	1.8%	1.8%	87.5%	1.8%
San Diego/Imperial	1993	86	3.5%	7.0%	7.0%	1.2%	9.3%	2.3%	3.5%	66.3%
	2000	67	3.0%	10.4%	0.0%	0.0%	3.0%	1.5%	6.0%	74.6%
Statewide Totals	1993	832	15.4%	19.5%	12.7%	10.2%	16.1%	12.1%	6.6%	7.3%
	2000	775	16.4%	21.7%	9.0%	7.5%	19.1%	9.1%	8.9%	8.2%

Appendix D Within-Region and Out-Region Placement
Percentages of UC First-Time Freshmen,
Fall 1993 and Fall 1999

*Appendix D Within Region and Out-Region Placement Percentages of UC First-Time Freshmen
from Public High Schools, Fall 1993 and Fall 1999*

High School Region		Public H.S. Participation Rate	UC Region Where the High School Graduates Enrolled (sums to 100%)							
			Sac. Area	SF. Bay Area	Central Coast	South Coast	LA County	Orange County	San Bern/ Riverside	San Diego/ Imperial
			UC Davis	UC Berkeley	Santa Cruz	Santa Barbara	UCLA	UC Irvine	UC Riverside	UC San Diego
Northern CA	1993	2.7%	37.1%	16.2%	19.3%	13.9%	3.1%	2.3%	0.4%	7.7%
	1999	3.7%	34.6%	12.1%	18.4%	17.5%	4.7%	2.0%	1.8%	8.8%
Sacramento Area	1993	5.5%	43.7%	14.9%	9.2%	12.8%	6.9%	2.2%	1.3%	9.0%
	1999	6.4%	40.2%	13.2%	10.2%	11.8%	6.8%	4.5%	2.5%	10.9%
SF Bay Area	1993	9.0%	32.3%	20.7%	10.6%	13.4%	9.9%	2.7%	1.6%	8.9%
	1999	10.3%	27.6%	18.2%	12.5%	12.5%	10.1%	5.7%	3.4%	9.9%
N. Central Valley	1993	3.0%	36.5%	12.5%	12.8%	14.7%	6.7%	4.5%	1.1%	11.2%
	1999	3.3%	34.3%	14.4%	9.0%	15.4%	8.6%	4.7%	3.4%	10.1%
So. Central Valley	1993	2.7%	26.3%	9.6%	9.4%	20.9%	13.8%	8.1%	3.8%	8.1%
	1999	3.4%	20.3%	11.4%	7.5%	15.7%	16.7%	9.4%	7.7%	11.2%
Central Coast	1993	6.3%	16.7%	9.4%	34.8%	18.1%	9.4%	2.8%	2.1%	6.6%
	1999	6.8%	17.7%	14.3%	29.1%	16.5%	7.1%	2.7%	3.7%	8.9%
South Coast	1993	6.2%	11.1%	13.5%	7.6%	34.8%	13.2%	6.2%	2.5%	11.0%
	1999	6.7%	8.5%	11.2%	10.7%	32.0%	13.4%	9.0%	2.7%	12.4%
L. A. County	1993	7.2%	3.8%	14.2%	5.1%	15.2%	25.6%	18.8%	8.0%	9.3%
	1999	7.7%	4.1%	11.3%	4.8%	12.2%	21.4%	20.1%	14.1%	12.0%
Orange County	1993	9.5%	4.9%	10.7%	4.1%	13.7%	16.5%	31.7%	7.3%	11.1%
	1999	9.3%	3.8%	12.4%	3.3%	12.2%	14.6%	33.5%	9.1%	11.0%

Appendix D (Continued)

High School Region		Regional Participation Rate	<i>Where the High School Graduates Enrolled</i>							
			Sac. Area	SF. Bay Area	Central Coast	South Coast	LA County	Orange County	San Bern/ Riverside	San Diego/ Imperial
			UC Davis	UC Berkeley	Santa Cruz	Santa Barbara	UCLA	UC Irvine	UC Riverside	UC San Diego
San Bernardino/ Riverside	1993	4.6%	3.2%	3.8%	2.9%	10.6%	12.0%	11.9%	46.5%	9.0%
	1999	5.1%	3.4%	5.6%	3.3%	9.1%	8.9%	12.4%	48.9%	8.4%
San Diego/Imperial	1993	6.8%	9.0%	11.8%	5.9%	14.8%	12.1%	7.0%	4.4%	35.1%
	1999	7.3%	8.4%	11.0%	8.2%	15.5%	11.2%	12.1%	7.0%	25.6%
Statewide Totals	1993	6.8%	15.7%	14.2%	7.6%	15.1%	15.6%	12.5%	7.6%	11.7%
	1999	7.1%	14.7%	13.0%	8.3%	13.5%	13.6%	13.9%	10.9%	12.1%

Appendix E	Regional Location of California Public Postsecondary Institutions and California Counties
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Counties Grouped By Region	University of California Campus	California State University	California Community College Districts
Northern California Butte Colusa Del Norte Glenn Humboldt Lake Lassen Mendocino Modoc Nevada Plumas Shasta Sierra Siskiyou Sutter Tehama Trinity Yuba		Chico State U. Humboldt State U	Butte-Glenn CCD Redwoods CCD Lassen CCD Mendocino-Lake CCD Feather River CCD Shasta-Tehama-Trinity CCD Siskiyou Joint CCD Yuba CCD
Sacramento Area El Dorado Placer Sacramento Yolo	UC, Davis	CSU, Sacramento	Lake Tahoe CCD Sierra Joint CCD Los Rios CCD
San Fran. Bay Area Alameda Contra Costa Marin Napa San Francisco San Mateo Santa Clara Solano Sonoma	UC, Berkeley UC, San Francisco	CSU, Hayward San Fran. State U. San Jose State U. Calif. Mar. Acad. Sonoma State U.	Chabot-Las Positas CCD Fremont-Newark CCD Peralta CCD Contra Costa CCD Marin CCD Napa Valley CCD San Francisco CCD San Matea County CCD Foothill-De Anza CCD Gavilan Joint CCD San Jose-Evergreen CCD West Valley-Mission CCD Solano CCD Sonoma CCD

DISPLAY Continued

Counties Grouped By Region	University of California Campus	California State University	California Community College Districts
North. Central Valley Alpine Amador Calaveras Madera Mariposa Merced Mono San Joaquin Stanislaus Tuolumne	UC, Merced	CSU, Stanislaus	Merced CCD San Joaquin Delta CCD Yosemite CCD
South. Central Valley Fresno Inyo Kern Kings Tulare		CSU, Fresno CSU, Bakerfield	State Center CCD West Hills CCD Kern CCD West Kern CCD Sequoias CCD
Central Coast Monterey San Benito Santa Cruz	UC, Santa Cruz	CSU, Monterey Bay	Hartnell CCD Monterey Peninsula CCD Cabrillo CCD
South Coast San Luis Obispo Santa Barbara Ventura	UC, Santa Barbara	Cal Poly, SLO CSU, Channel Islands	San Luis Obispo County CCD Allan Hancock CCD Santa Barbara CCD Ventura County CCD

DISPLAY Continued

Counties Grouped By Region	University of California Campus	California State University	California Community College Districts
Los Angeles County Los Angeles	UC, Los Angeles	Cal Poly, Pomona CSU, Dominguez CSU, Long Beach CSU, Los Angeles CSU, Northridge	Antelope Valley CCD Cerritos CCD Citrus CCD Compton CCD El Camino CCD Glendale CCD Long Beach CCD Los Angeles CCD Mt. San Antonio CCD Pasadena Area CCD Rio Hondo CCD Santa Clarita CCD Santa Monica CCD
Orange County Orange County	UC, Irvine	CSU, Fullerton	Coast CCD North Orange County CCD Rancho Santiago CCD South Orange County CCD
San Bern./Riverside Riverside San Bernardino	UC, Riverside	CSU, San Bernardino	Desert CCD Mt. San Jacinto CCD Palo Verde CCD Riverside CCD Barstow CCD Chaffey CCD San Bernardino CCD Victor Valley CCD
San Diego/Imperial Imperial San Diego	UC, San Diego	San Diego State CSU, San Marcos	Imperial CCD Grossmont-Cuyamaca CCD Mira Costa CCD Palomar CCD San Diego CCD Southwestern CCD
11 Regions/58 Counties	10 UC Campuses	23 CSU Campuses	71 CC Districts

